

MISSOURI DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF ENVIRONMENTAL QUALITY  
LABORATORY SERVICES PROGRAM

RECEIVED

JAN 25 1990

Site Investigation Sampling Report  
Leo Eisenberg's Property  
Kansas City, MO

KCRO

Information received by the Missouri Department of Natural Resources (MDNR) indicates that wastes may have been disposed of on the property of Mr. Leo Eisenberg in Clay County at Kansas City, Missouri. As part of a Site Investigation (SI) requested by the Waste Management Program (WMP), sampling was conducted by Larry Alderson and Larry Coen of the Laboratory Services Program accompanied by John Schofield of the Kansas City Regional Office on July 25, 1989. The results of the sampling will aid the WMP in scoring the site according to the Hazard Ranking System (HRS).

SITE DESCRIPTION & HISTORY

On April 6, 1988, the Emergency Planning and Response Branch of EPA received a call from the Kansas City Fire Department reporting several pools of an unknown liquid in a fill near the intersection of 16th Street and Interstate 35. A subsequent investigation by EPA revealed three puddles of dark stained water at the base of the northeast corner of the fill area. The results of a sample collected by EPA indicated the presence of vanadium and arsenic.

METHODS

Composited sediment samples were collected and thoroughly mixed with the aid of stainless steel spoons and placed into one pint glass containers. Water samples were collected by submerging the appropriate containers below the surface of the water until they were full.

Each sample was given a numbered tag at the time of collection and a corresponding number was recorded on a chain-of-custody sheet. All samples were hand delivered to the Divisional Laboratory in Jefferson City for analyses of volatile organics, total metals (Ba, Hg, Ag, Cd, Cr, Pb, Se, As and V) and base/neutrals.

Site:	Leo Eisenberg
ID #:	MOD985768175
Break:	1-3
Other:	MDNR
1-24-90	

30808313



Superfund

OBSERVATIONS

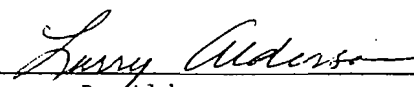
Only two small shallow pools, approximately six feet in diameter and five or six inches deep, were found at the site during this investigation (see sample location map attached as Appendix A). Both pools contained a chocolate brown colored water. The presence of the pools seemed unusual considering that there had not been any recent rainfall in the area and that the area was made-up, to a large extent, of rock and gravel fill. Several midge or mosquito larva were observed swimming in the pool from which the water sample, 89-1738, was collected.

A sediment sample, 89-1736, was collected from the pool area. A background or upgradient sediment sample, 89-1737, was also collected approximately 50 feet south of the pools. Core samples were not collected during this investigation because the rock and gravel fill in the area of the pools did not allow for the use of hand augers.

DATA REPORTING

The analytical results of samples collected during this Site Investigation are attached as Appendix B.

Submitted by:

  
Larry D. Alderson  
Environmental Emergency Specialist  
Field Services Section  
Laboratory Services Program

Date:

January 24, 1990

Approved by:

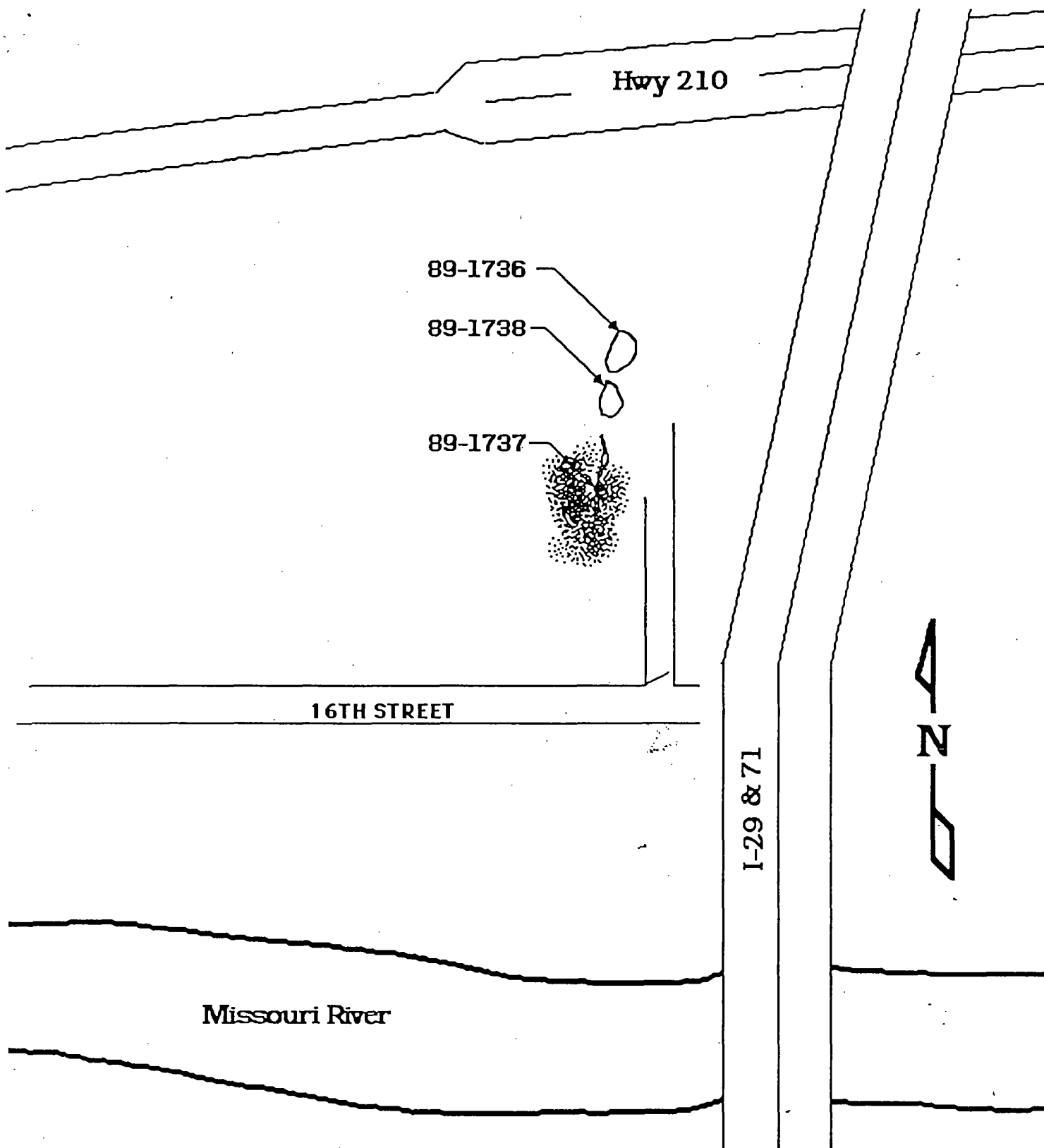
  
James H. Long  
Director  
Laboratory Services Program

JHL:lad

cc: Keith Schardein, Superfund Section Chief, Waste Management Program  
Jim McConathy, Regional Administrator, Kansas City Regional Office ✓

APPENDIX A

Sample Location Sketch  
Leo Eisenberg's Property  
Kansas City, MO



## Leo Eisenberg's Property

Sample location sketch  
July 25, 1989

not to scale

APPENDIX B

Analytical Results  
Leo Eisenberg's Property  
Kansas City, MO

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LABORATORY SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 89-1736

*POOL SEDIMENT*

Reported to: LARRY ALDERSON  
Affiliation: EER

Date: 12/07/89  
Project Code: 3535/3000

Sample Description:  
LEO EISENBERG'S PROPERTY  
SEDIMENT SAMPLE FROM POOL AREA

Collected by: LARRY ALDERSON  
Affiliation: EER

Date: 07/25/89

<u>PARAMETERS</u>	<u>RESULTS</u>
TOTAL SILVER COMMENTS : Dry Weight	170 ug/Kg
TOTAL BARIUM COMMENTS : Dry Weight	140,000 ug/Kg
TOTAL CADMIUM COMMENTS : Dry Weight	3600 ug/Kg
TOTAL CHROMIUM COMMENTS : Dry Weight	10,000 ug/Kg
TOTAL MERCURY	1500 ug/Kg
TOTAL LEAD COMMENTS : Dry Weight	84,000 ug/Kg
TOTAL SELENIUM COMMENTS : Dry Weight	200 ug/Kg
TOTAL VANADIUM	85,000 ug/Kg Dry Weight
Acrolein	Not analyzed
Acrylonitrile	Not analyzed
Acetone	< 100 ug/Kg
Benzene	< 25 ug/Kg

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Sample no. 89-1736  
Date 12/07/89

<u>PARAMETERS</u>	<u>RESULTS</u>
Bromomethane	< 25 ug/Kg
Bromodichloromethane	< 25 ug/Kg
Bromoform	< 25 ug/Kg
2-Butanone	< 100 ug/Kg
Carbon Disulfide	< 25 ug/Kg
Carbon Tetrachloride	< 25 ug/Kg
Chlorobenzene	< 25 ug/Kg
Chloroethane	< 25 ug/Kg
2-Chloroethylvinyl ether	Not Analyzed
Chloroform	< 25 ug/Kg
Chloromethane	< 25 ug/Kg
Dibromochloromethane	< 25 ug/Kg
1,1-Dichloroethane	< 25 ug/Kg
1,2-Dichloroethane	< 25 ug/Kg
1,1-Dichloroethylene	< 25 ug/Kg
1,2-Dichloroethylene	< 25 ug/Kg
1,2-Dichloropropane	< 25 ug/Kg
cis-1,3-Dichloropropene	< 25 ug/Kg
trans-1,3-Dichloropropene	< 25 ug/Kg
Ethylbenzene	< 25 ug/Kg
2-Hexanone	< 100 ug/Kg
Methylene Chloride	< 100 ug/Kg
4-Methyl-2-Pentanone	< 100 ug/Kg
Styrene	< 25 ug/Kg
1,1,2,2-Tetrachloroethane	< 25 ug/Kg
Tetrachloroethylene	< 25 ug/Kg
1,1,1-Trichloroethane	< 25 ug/Kg
1,1,2-Trichloroethane	< 25 ug/Kg
Trichloroethylene	< 25 ug/Kg
Trichlorofluoromethane	Not analyzed
Toluene	< 25 ug/Kg
Total Xylenes	< 50 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride	< 25 ug/Kg
COMMENTS: Analyzed by GC/MS at the Missouri Department of Natural Resources Laboratory.	
Acenaphthene	< 500 ug/Kg
Acenaphthylene	< 500 ug/Kg

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Sample no. 89-1736  
Date 12/07/89

PARAMETERS

RESULTS

Aniline	Not Analyzed
Anthracene	< 500 ug/Kg
Benzo(a)anthracene	3800 ug/Kg
Benzo(a)pyrene	3800 ug/Kg
Benzo(b)fluoranthene	7400 ug/Kg
Benzo(ghi)perylene	3500 ug/Kg
Benzoic acid	Not Analyzed
Benzo(k)fluoranthene	< 500 ug/Kg
Benzyl alcohol	Not Analyzed
Bis(2-chloroethoxy)methane	< 500 ug/Kg
Bis(2-chloroethyl)ether	< 500 ug/Kg
Bis(2-chloroisopropyl)ether	< 500 ug/Kg
Bis(2-ethylhexyl)phthalate	600 ug/Kg
4-Bromophenyl phenyl ether	< 500 ug/Kg
Butyl benzyl phthalate	< 500 ug/Kg
4-Chloroaniline	Not Analyzed
2-Chloronaphthalene	< 500 ug/Kg
4-Chlorophenyl phenyl ether	< 500 ug/Kg
Chrysene	5100 ug/Kg
Dibenzo(a,h)anthracene	< 500 ug/Kg
Dibenzofuran	Not Analyzed
1,2-Dichlorobenzene	< 500 ug/Kg
1,3-Dichlorobenzene	< 500 ug/Kg
1,4-Dichlorobenzene	< 500 ug/Kg
3,3-Dichlorobenzidine	< 5000 ug/Kg
Diethylphthalate	< 500 ug/Kg
Dimethylphthalate	< 500 ug/Kg
Di-N-Butylphthalate	< 500 ug/Kg
2,4-Dinitrotoluene	< 500 ug/Kg
2,6-Dinitrotoluene	< 500 ug/Kg
Di-n-octyl phthalate	< 500 ug/Kg
Fluoranthene	7600 ug/Kg
Fluorene	< 500 ug/Kg
Hexachlorobenzene	< 500 ug/Kg
Hexachlorobutadiene	< 500 ug/Kg
Hexachlorocyclopentadiene	< 500 ug/Kg
Hexachloroethane	< 500 ug/Kg
Indeno(1,2,3-cd)pyrene	3000 ug/Kg
Isophorone	< 500 ug/Kg



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Sample no. 89-1736  
Date 12/07/89

<u>PARAMETERS</u>	<u>RESULTS</u>
2-Methylnaphthalene	Not Analyzed
Naphthalene	< 500 ug/Kg
2-Nitroaniline	Not Analyzed
3-Nitroaniline	Not Analyzed
4-Nitroaniline	Not Analyzed
N-Nitrosodimethylamine	< 500 ug/Kg
N-Nitrosodi-n-propylamine	< 500 ug/Kg
N-Nitrosodiphenylamine	< 500 ug/Kg
Phenanthrene	3900 ug/Kg
Pyrene	9500 ug/Kg
1,2,4-Trichlorobenzene	< 500 ug/Kg

COMMENTS: Analyzed by GC/MS at Continental  
Analytical Services, Inc.

LABORATORY SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 89-1737

UPGRADIENT  
SEDIMENT

Reported to: LARRY ALDERSON  
Affiliation: EER

Date: 12/07/89  
Project Code: 3535/3000

Sample Description:  
LEO EISENBERG'S PROPERTY  
SEDIMENT SAMPLE UPGRADIENT OF POOL AREA

Collected by: LARRY ALDERSON  
Affiliation: EER

Date: 07/25/89

<u>PARAMETERS</u>	<u>RESULTS</u>
TOTAL SILVER	72 ug/Kg
COMMENTS : Dry Weight	
TOTAL BARIUM	200,000 ug/Kg
COMMENTS : Dry Weight	
TOTAL CADMIUM	2300 ug/Kg
COMMENTS : Dry Weight	
TOTAL CHROMIUM	12,000 ug/Kg
COMMENTS : Dry Weight	
TOTAL MERCURY	850 ug/Kg
TOTAL LEAD	38,000 ug/Kg
COMMENTS : Dry Weight	
TOTAL SELENIUM	120 ug/Kg
COMMENTS : Dry Weight	
TOTAL VANADIUM	17,000 ug/Kg
	Dry Weight
Acrolein	Not analyzed
Acrylonitrile	Not analyzed
Acetone	< 100 ug/Kg
Benzene	< 25 ug/Kg

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Sample no. 89-1737  
Date 12/07/89

<u>PARAMETERS</u>	<u>RESULTS</u>
Bromomethane	< 25 ug/Kg
Bromodichloromethane	< 25 ug/Kg
Bromoform	< 25 ug/Kg
2-Butanone	< 100 ug/Kg
Carbon Disulfide	< 25 ug/Kg
Carbon Tetrachloride	< 25 ug/Kg
Chlorobenzene	< 25 ug/Kg
Chloroethane	< 25 ug/Kg
2-Chloroethylvinyl ether	Not Analyzed
Chloroform	< 25 ug/Kg
Chloromethane	< 25 ug/Kg
Dibromochloromethane	< 25 ug/Kg
1,1-Dichloroethane	< 25 ug/Kg
1,2-Dichloroethane	< 25 ug/Kg
1,1-Dichloroethylene	< 25 ug/Kg
1,2-Dichloroethylene	< 25 ug/Kg
1,2-Dichloropropane	< 25 ug/Kg
cis-1,3-Dichloropropene	< 25 ug/Kg
trans-1,3-Dichloropropene	< 25 ug/Kg
Ethylbenzene	< 25 ug/Kg
2-Hexanone	< 100 ug/Kg
Methylene Chloride	< 100 ug/Kg
4-Methyl-2-Pentanone	< 100 ug/Kg
Styrene	< 25 ug/Kg
1,1,2,2-Tetrachloroethane	< 25 ug/Kg
Tetrachloroethylene	< 25 ug/Kg
1,1,1-Trichloroethane	< 25 ug/Kg
1,1,2-Trichloroethane	< 25 ug/Kg
Trichloroethylene	< 25 ug/Kg
Trichlorofluoromethane	Not analyzed
Toluene	< 25 ug/Kg
Total Xylenes	< 50 ug/Kg
Vinyl Acetate	< 100 ug/Kg
Vinyl Chloride	< 25 ug/Kg
COMMENTS: Analyzed by GC/MS at the Missouri Department of Natural Resources Laboratory.	
Acenaphthene	< 500 ug/Kg
Acenaphthylene	< 500 ug/Kg

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Sample no. 89-1737  
Date 12/07/89

PARAMETERS

RESULTS

Aniline	Not Analyzed
Anthracene	< 500 ug/Kg
Benzo(a)anthracene	< 500 ug/Kg
Benzo(a)pyrene	800 ug/Kg
Benzo(b)fluoranthene	700 ug/Kg
Benzo(ghi)perylene	< 500 ug/Kg
Benzoic acid	Not Analyzed
Benzo(k)fluoranthene	< 500 ug/Kg
Benzyl alcohol	Not Analyzed
Bis(2-chloroethoxy)methane	< 500 ug/Kg
Bis(2-chloroethyl)ether	< 500 ug/Kg
Bis(2-chloroisopropyl)ether	< 500 ug/Kg
Bis(2-ethylhexyl)phthalate	600 ug/Kg
4-Bromophenyl phenyl ether	< 500 ug/Kg
Butyl benzyl phthalate	< 500 ug/Kg
4-Chloroaniline	Not Analyzed
2-Chloronaphthalene	< 500 ug/Kg
4-Chlorophenyl phenyl ether	< 500 ug/Kg
Chrysene	600 ug/Kg
Dibenzo(a,h)anthracene	< 500 ug/Kg
Dibenzofuran	Not Analyzed
1,2-Dichlorobenzene	< 500 ug/Kg
1,3-Dichlorobenzene	< 500 ug/Kg
1,4-Dichlorobenzene	< 500 ug/Kg
3,3-Dichlorobenzidine	< 5000 ug/Kg
Diethylphthalate	< 500 ug/Kg
Dimethylphthalate	< 500 ug/Kg
Di-N-Butylphthalate	< 500 ug/Kg
2,4-Dinitrotoluene	< 500 ug/Kg
2,6-Dinitrotoluene	< 500 ug/Kg
Di-n-octyl phthalate	< 500 ug/Kg
Fluoranthene	800 ug/Kg
Fluorene	< 500 ug/Kg
Hexachlorobenzene	< 500 ug/Kg
Hexachlorobutadiene	< 500 ug/Kg
Hexachlorocyclopentadiene	< 500 ug/Kg
Hexachloroethane	< 500 ug/Kg
Indeno(1,2,3-cd)pyrene	< 500 ug/Kg
Isophorone	< 500 ug/Kg

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Sample no. 89-1737  
Date 12/07/89

PARAMETERS

RESULTS

2-Methylnaphthalene	Not Analyzed
Naphthalene	< 500 ug/Kg
2-Nitroaniline	Not Analyzed
3-Nitroaniline	Not Analyzed
4-Nitroaniline	Not Analyzed
N-Nitrosodimethylamine	< 500 ug/Kg
N-Nitrosodi-n-propylamine	< 500 ug/Kg
N-Nitrosodiphenylamine	< 500 ug/Kg
Phenanthrene	< 500 ug/Kg
Pyrene	700 ug/Kg
1,2,4-Trichlorobenzene	< 500 ug/Kg

COMMENTS: Analyzed by GC/MS at Continental  
Analytical Services, Inc.

LABORATORY SERVICES PROGRAM  
RESULT OF SAMPLE ANALYSIS

Sample No. 89-1738

Reported to: LARRY ALDERSON  
Affiliation: EER

Date: 12/08/89  
Project Code: 3535/3000

Sample Description:  
LEO EISENBERG'S PROPERTY  
WATER SAMPLE FROM POOL

Collected by: LARRY ALDERSON  
Affiliation: EER

Date: 07/25/89

<u>PARAMETERS</u>	<u>RESULTS</u>
TOTAL SILVER	7.1 ug/L
TOTAL BARIUM	600 ug/L
TOTAL CADMIUM	57 ug/L
TOTAL CHROMIUM	170 ug/L
TOTAL MERCURY	690 ug/L
TOTAL LEAD	180 ug/L
TOTAL SELENIUM	15 ug/L
TOTAL VANADIUM	1900 ug/L
Acrolein	Not analyzed
Acrylonitrile	Not analyzed
Acetone	< 100 ug/L
Benzene	< 25 ug/L
Bromomethane	< 25 ug/L
Bromodichloromethane	< 25 ug/L
Bromoform	< 25 ug/L
2-Butanone	< 100 ug/L
Carbon Disulfide	< 25 ug/L
Carbon Tetrachloride	< 25 ug/L
Chlorobenzene	< 25 ug/L

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Sample no. 89-1738  
Date 12/08/89

<u>PARAMETERS</u>	<u>RESULTS</u>
Chloroethane	< 25 ug/L
2-Chloroethylvinyl ether	Not Analyzed
Chloroform	< 25 ug/L
Chloromethane	< 25 ug/L
Dibromochloromethane	< 25 ug/L
1,1-Dichloroethane	< 25 ug/L
1,2-Dichloroethane	< 25 ug/L
1,1-Dichloroethylene	< 25 ug/L
1,2-Dichloroethylene	< 25 ug/L
1,2-Dichloropropane	< 25 ug/L
cis-1,3-Dichloropropene	< 25 ug/L
trans-1,3-Dichloropropene	< 25 ug/L
Ethylbenzene	< 25 ug/L
2-Hexanone	< 100 ug/L
Methylene Chloride	< 100 ug/L
4-Methyl-2-Pentanone	< 100 ug/L
Styrene	< 25 ug/L
1,1,2,2-Tetrachloroethane	< 25 ug/L
Tetrachloroethylene	< 25 ug/L
1,1,1-Trichloroethane	< 25 ug/L
1,1,2-Trichloroethane	< 25 ug/L
Trichloroethylene	< 25 ug/L
Trichlorofluoromethane	Not analyzed
Toluene	< 25 ug/L
Total Xylenes	< 50 ug/L
Vinyl Acetate	< 100 ug/L
Vinyl Chloride	< 25 ug/L

COMMENTS: Analyzed by GC/MS at the Missouri  
Department of Natural Resources Laboratory.  
Detection limits are elevated for this sample  
due to foaming problems during purging,  
requiring sample dilution.

Acenaphthene	< 5.0 ug/L
Acenaphthylene	< 5.0 ug/L
Aniline	Not Analyzed
Anthracene	< 5.0 ug/L
Benzo(a)anthracene	< 5.0 ug/L
Benzo(a)pyrene	< 5.0 ug/L

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Sample no. 89-1738  
Date 12/08/89

<u>PARAMETERS</u>	<u>RESULTS</u>
Benzo(b)fluoranthene	< 5.0 ug/L
Benzo(ghi)perylene	< 5.0 ug/L
Benzoic acid	Not Analyzed
Benzo(k)fluoranthene	< 5.0 ug/L
Benzyl alcohol	Not Analyzed
Bis(2-chloroethoxy)methane	< 5.0 ug/L
Bis(2-chloroethyl)ether	< 5.0 ug/L
Bis(2-chloroisopropyl)ether	< 5.0 ug/L
Bis(2-ethylhexyl)phthalate	37 ug/L
4-Bromophenyl phenyl ether	< 5.0 ug/L
Butyl benzyl phthalate	< 5.0 ug/L
4-Chloroaniline	Not Analyzed
2-Chloronaphthalene	< 5.0 ug/L
4-Chlorophenyl phenyl ether	< 5.0 ug/L
Chrysene	< 5.0 ug/L
Dibenzo(a,h)anthracene	< 5.0 ug/L
Dibenzofuran	Not Analyzed
1,2-Dichlorobenzene	< 5.0 ug/L
1,3-Dichlorobenzene	< 5.0 ug/L
1,4-Dichlorobenzene	< 5.0 ug/L
3,3-Dichlorobenzidine	< 50 ug/L
Diethylphthalate	< 5.0 ug/L
Dimethylphthalate	< 5.0 ug/L
Di-N-Butylphthalate	< 5.0 ug/L
2,4-Dinitrotoluene	< 5.0 ug/L
2,6-Dinitrotoluene	< 5.0 ug/L
Di-n-octyl phthalate	< 5.0 ug/L
Fluoranthene	< 5.0 ug/L
Fluorene	< 5.0 ug/L
Hexachlorobenzene	< 5.0 ug/L
Hexachlorobutadiene	< 5.0 ug/L
Hexachlorocyclopentadiene	< 5.0 ug/L
Hexachloroethane	< 5.0 ug/L
Indeno(1,2,3-cd)pyrene	< 5.0 ug/L
Isophorone	< 5.0 ug/L
2-Methylnaphthalene	Not Analyzed
Naphthalene	< 5.0 ug/L
2-Nitroaniline	Not Analyzed
3-Nitroaniline	Not Analyzed



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Sample no. 89-1738  
Date 12/08/89

PARAMETERS

RESULTS

4-Nitroaniline	Not Analyzed
N-Nitrosodimethylamine	< 5.0 ug/L
N-Nitrosodi-n-propylamine	< 5.0 ug/L
N-Nitrosodiphenylamine	< 5.0 ug/L
Phenanthrene	< 5.0 ug/L
Pyrene	< 5.0 ug/L
1,2,4-Trichlorobenzene	< 5.0 ug/L

COMMENTS: Analyzed by GC/MS at the Missouri  
Department of Natural Resources Laboratory